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Modeling and Prediction of Groundwater Contaminant Plumes

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Message from the Guest Editors

Dear Colleagues,

The detection and monitoring of groundwater contamination plumes is a crucial aspect of water resource management in the context of increasing anthropogenic pressures. Various disciplines have focused on this problem with their own tools. This Special Issue will be devoted to modeling and forecasting pollution plumes in groundwater. The types of pollutant that can generate plumes with which we are concerned include: chemical contamination (synthetic products or not), radioactive contamination, microbiological contamination, thermal contamination, etc., without limitation.

Potential topics include, but are not limited to:

- the acquisition of data necessary for the development, calibration, and validation of models;
- reaction aspects (physico-chemical and/or biological) and dispersion aspects of pollutant transport;
- the numerical aspects of modeling two-dimensional (2D) and three-dimensional (3D) plumes (the discretization problem);
- measurements of the location of the contours of pollutant plumes; and
- applications of models of pollution plumes to water resource management (natural attenuation or monitored natural attenuation).



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Special Issue



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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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